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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------------|---------------------|------------------|
| 10/784,406 | 02/23/2004 | Franciscus J.T. Krabbenborg | 62449A | 1848 |

109 7590 12/13/2005
THE DOW CHEMICAL COMPANY
INTELLECTUAL PROPERTY SECTION
P. O. BOX 1967
MIDLAND, MI 48641-1967

EXAMINER

ZEMEL, IRINA SOPJIA

ART UNIT PAPER NUMBER

1711

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/784,406

Applicant(s)

KRABENBORG ET AL.

Examiner

Irina S. Zemel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>2/28/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 claims a method, but depends on a product claim 16. Appropriate correction of dependency (or the claimed category) is required. For the purposes of the art rejection claim 18 is treated as depending on the process claim 17.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1- 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 1299480 to Imperial Chemical Industries, Limited., (hereinafter "ICI") in combination with US Patent 3,700,758 to Johnson et al., (hereinafter "Johnson").

ICI discloses foamable compositions comprising ethylene copolymers with acrylic acid or methacrylic acid (see paragraph bridging pages 1 and 2), and blowing agents. (see example 3). While the reference does not exemplifies terpolymers, the reference

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expressly discloses various comonomers (referring to them in plural) that can be copolymerized with ethylene, thus making either di-polymers and terpolymers obvious with reasonable expectation of adequate results absent showing of unexpected results that can be clearly attributed to the specifically claimed polymer make-up. The reference expressly discloses addition of crosslinking agents, such as peroxide listed in the paragraph bridging pages 2 and 3, which are identical to the peroxides disclosed in the applicants specification and, inherently exhibit the claimed half-life temperatures. The reference further expressly discloses addition of fillers, tackifiers and processing oils, all in the amounts that overlap with the claimed amounts. See page 2 The reference further expressly discloses a method of joining tapes by melting the adhesive compositions deposited between the tapes. See, for example, claim 8 of the reference. The difference between the claimed invention and the disclosed invention is the physical form of the adhesive composition, i.e., the reference discloses free flowable powders, while the claimed composition is in a form of a free flowable pellets.

In essence, the difference between the disclosed invention and the claimed invention is that the applicants employ a known reactive hot melt composition that is disclosed to be in a form of powder re-shape in into a form of pellets (or palletize it). It is well established in the courts that change in size or shape of a known components is not sufficient to support patentability See, for example, *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Furthermore, it is well known in the art to palletize or somehow otherwise compact powdered compositions or reduce to pellets large pieces of plastics to facilitate handling and transportation of the plastic, as for example, evidenced by

Johnson expressly disclosing that it is textbook known to prepare hot melt adhesives in the form of pellets for easy handling (see background). Thus, extruding powdered composition to obtain pellets would have been obvious to obtain easy to handle composition. It is reasonable believed that upon extruding compositions of ICI into pellets, the resulting pellets are inherently free-flowable since their composition is identical to the composition of the claimed pellets and the initial powder is free-flowable. The burden is shifted to the applicants to provide factual evidence to the contrary.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4,480,054 to Enderle (hereinafter "Enderle") in combination with ICI and furthering view of Johnson.

Enderle . discloses foamable compositions comprising ethylene copolymers with acrylic acid or methacrylic acid, including di-or terpolymers corresponding to the claimed copolymers (see column 1, lines 51-61), and blowing agents (see column 3, lines 10-12). The reference expressly discloses addition of crosslinking agents, such as peroxide listed in Column 3, lines 20-25., which are identical to the peroxides disclosed in the applicants specification and, inherently exhibit the claimed half-life temperatures. The reference further expressly discloses addition of fillers, and processing oils, all in the amounts that overlap with the claimed amounts. See column 3, lines 46-57 and illustrative examples. The reference does not disclose addition of tackifier, however, for the applications when the compositions needs to be used as an adhesive, addition of tackifiers is known as per disclosure of ICI, page 2. The other difference between the claimed invention and the disclosed invention is the physical form of the adhesive

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composition, i.e., the reference discloses bulk compositions or sheets, while the claimed composition is in a form of a free flowable pellets.

As discussed above, the difference between the disclosed invention and the claimed invention is that the applicants employ a known reactive hot melt composition that is disclosed to be in bulk to re-shape in into a form of pellets (or palletize it). As discussed above, change in size or shape of a known components is not sufficient to support patentability and it is well known in the art to palletize or somehow otherwise compact powdered compositions or reduce to pellets large pieces of plastics to facilitate handling and transportation of the plastic, as for example, evidenced by Johnson. Thus, extruding powdered composition to obtain pellets would have been obvious to obtain easy to handle composition. It is reasonable believed that upon extruding compositions of Johnson as modified in view of ICI into pellets, the resulting pellets are inherently free-flowable since their composition is identical to the composition of the claimed pellets. The burden is shifted to the applicants to provide factual evidence to the contrary.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina S. Zemel whose telephone number is (571)272-0577. The examiner can normally be reached on Monday-Friday 9-5.

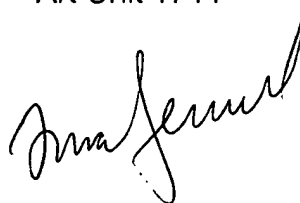
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571)272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Irina S. Zemel
Examiner
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ISZ

A handwritten signature in black ink, appearing to read "Irina Zemel", written in a cursive style.